

## ABSTRACT

Disclosed are systems and methods for generating a progressively corrected scan signal, the progressively corrected scan signal having a magnitude independent of spectral reflectance from a background near a target. One of the methods disclosed comprises generating a baseline signal by sampling light reflected from the target and background before transmitting a light scan at the target, generating a detected signal by receiving light reflected from the target and background while transmitting the light scan at the target, and subtracting the baseline signal from the detected signal to form the progressively corrected scan signal. Also disclosed are circuits for producing an average level independent output signal from an input signal subject to fluctuations in average level.